Regression Testing Page 1 of 2

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HHSDC Home

BP Home Page

The MSC

CMM

POST Enterprise

The Project Office

Life Cycle Processes

Search BP

HHSDC Links

Resources Library

QAWG NEW!

SID Policy NEW!
Contact Us



Regression Testing

Test Main

Test Phases Main

My CA

search

Purpose:

The purpose of regression testing is to ensure that areas which were not directly modified have not been adversely or unexpectedly affected by the changes. The emphasis is on performing tests not directly related to the areas being changed, to ensure they still perform as expected.

Regression testing may be performed within each test phase (after completing the planned test cases and before the exit criteria review), or as a separate test phase by itself. SID usually considers regression a separate test phase and performs the phase concurrent with performance testing (if resources allow).

Assumptions/Pre-Conditions:

The test organization should have completed system testing successfully and all high priority errors should have been addressed. An updated version of the code should have been delivered to the Configuration Manager.

Expectations:

- The primary emphasis is to execute end-to-end and a few targeted test cases and workflows to
 ensure that the system performs as expected with no unanticipated errors or impacts. Usually test
 materials from System Testing are re-used and some new tests may be created to supplement
 testing.
- Typical tests include:
 - Normal/typical workflows
 - o Typical and high-volume exceptions
 - Affected areas
 - Areas related to the affected areas (i.e., functions which precede or follow the affected areas in the processing flow)
 - o Printing of reports
- Results from previous releases should be compared to current test results. System areas that had no changes should produce results that are the same as previous releases.
 - By re-using existing materials, it ensures consistent results are received and also provides a basis for procedure improvement.

Responsibilities:

- · Creation of Tests Tester
- · Execution of Tests Tester
- Approval of Test Results/Exit Decision Test Manager, QA Manager, Configuration Manager, State Project Manager
- For a complete list of roles and responsibilities, refer to the <u>Responsibility Assignment Matrix</u> (<u>RAM</u>) (MS Word)

Environment:

Regression Test Environment

Type of Data:

Regression Testing Page 2 of 2

Real data - data which was processed on the legacy system and is now being re-used for testing

Exit Decisions:

- Refer to the general test exit/acceptance criteria.
- Go/No-Go Decision: Is the system ready for Acceptance Test?

References:

- IEEE Standard 829-1998, Standard for Software Test Documentation (link to pdf)
- IEEE Standard <u>1012-1998</u>, Standard for Software Verification and Validation, Table 1, Section 5.4.5 within table (the tables appear prior to the annex) (link to pdf)
- Archived IEEE Standard <u>1059-1993</u>, Guide for Software Verification and Validation Plans, Sections 4.2.4 and 5.5.6 (link to pdf)

Samples:

• CWS/CMS Regression Test Exit Report (MS Word)